- 4. What do you think the major economic characteristics of the 1990s will be? Why?
- 5. True or false? All nonmarket transactions are illegal. Explain.

Unemployment and Inflation

What do you think would happen if everyone in the United States woke up one morning and decided to start spending only half of the amount of money that they had been spending? This is a very unlikely situation, but let's suppose it really happens. What economic effect would this collective decision produce?

The total impact on the economy would be very large indeed. Let's pull out our economic microscope once again and focus on one small retail store—Joe's Super Sportshop in Plum City, Washington. Joe's business will, in effect, become a microcosm of how businesses will react all across the United States.

First, Joe immediately begins to notice that fewer customers are coming into his store. Before long, he has to let his part-time clerk go. But for Joe himself: so far, so good; he is not yet facing any major problems. As time goes on, however, Joe observes something very disturbing: *inventory is piling up*. Walking into the storage room, he stumbles over a large box of unsold baseball mitts that he ordered two months ago when business was better. Things are a little more serious now.

Joe decides to try to get rid of his excess mitts by putting them on sale. More importantly (to the economy), he sends a message to the baseball-mitt distributor in Seattle, asking him not to ship any more mitts to the shop. The bad news is channeled up to Ajax Mitt Company in Blackstone, Maine. Ajax, in fact, is getting the same bad news from all of its distributors around the country. At first, Ajax cuts overtime, but its directors soon realize that they must lay off 30 percent of their workers to keep inventory from piling up at Ajax. The directors meet in an emergency session to discuss the new plant that is scheduled for ground-breaking ceremonies next week. They decide to halt all expansion plans indefinitely.

Of course, similar actions are being taken by other industries throughout the nation. Major layoffs are made in the automobile, steel, and housing industries, and orders for new plants and equipment are reduced to a fraction of last year's level. National unemployment soon rises to 25 percent.

With many people on reduced incomes (or no incomes at all), spending falls to lower levels; this downward spiral continues to drag the economy down even further. What is the eventual result of this seemingly simple decision to curtail spending? It has brought on a devastating depression! Thus, recession, depression, high unemployment, and other extreme negative economic swings occur primarily because enough individuals or groups of people somewhere in the economy decide (for any number of reasons) to spend less. These people do not necessarily have to be consumers; they can be other major spenders, such as businesses, federal, state, or local governments, or foreign buyers.

Economists summarize the four major categories of spending as:

- Consumption expenditures C
- Investment spending I
- Government expenditures G
- Net foreign exports X_n

Thus, we can now say that any large reduction in C, I, G, or X_n spending will set forces into motion that can lead to a recession or, possibly, to a depression.

Returning to our example, let's assume we are now going through the economic stage called recession. What is a recession, and how does it differ from a depression?

Recession versus Depression

Economists say we are in a **recession** when the economy experiences at least a one-half-year period of declining real GNP. By

this definition, our economy has experienced nine recessions since World War II: 1949, 1954, 1958, 1960, 1970, 1974, 1980, 1982, and 1990. In terms of unemployment, our most severe recent recession was in 1982 when, for a number of months, over 10 percent of the labor force was out of work. The mildest recession was in 1970, with only 5 percent unemployment.

If a recession is a bad cold, a depression is pneumonia. In effect, a **depression** is a severe and prolonged recession. During the Great Depression of the 1930s, which lasted approximately a decade, unemployment rates ranged from 12 to 25 percent (1933). In no year during the 1931–1941 decade did the national jobless rate drop below the 10 percent figure!

Depressions have a touch of economic insanity. In the 1930s, idle machines and idle men and women *could* have been producing goods and services that the nation desperately needed. But the people did no work and the machines rusted—and nobody knew what to do about it.

A comparable tragedy occurred in rural areas. In one part of the nation, fruit and grain ripened and livestock fattened in our great plains and fertile valleys. But some farmers actually destroyed their livestock or burned their grain or let the ripened fruit rot while other people went hungry because they had little or no income and therefore no purchasing power. In her book The Invisible Scar (New York: David McKay, 1966), Caroline Bird retells a number of stories that illustrate some of the sadness and suffering during those years:

Miners tried to plant vegetables, but they were often so hungry that they ate them before they were ripe. On her first trip to the mountains, Eleanor Roosevelt saw a little boy trying to hide his pet rabbit. "He thinks we are not going to eat it," his sister told her, "but we are." [pp. 26–27]

A year after his defeat by Roosevelt, Hoover—who had repeated so many times that no one was starving—went on a fishing trip with cartoonist "Ding" Darling in the Rocky Mountains. One morning, a local man came into their camp, found Hoover awake, and led him to a shack where one child lay dead and seven others were in the last stages of starvation. Hoover took the children to a hospital, made a few phone calls, and raised a fund of \$3030 for them. [p. 39]

In addition, disastrous weather conditions in some parts of the country added to the general economic suffering. In the midwestern wheat and corn belt, desperate, bankrupt farmers choked on dust from the worst drought that anyone could remember. Some malicious and sinister force in the air seemed to paralyze all economic activity and turned topsy turvy the economic laws that had always worked for our benefit. This force almost broke our spirit, as John Steinbeck captures in *The Grapes of Wrath* (1939):

The women studied the men's faces secretly, for the corn could go, as long as something else remained. The children stood nearby, drawing figures in the dust with bare toes, and the children sent exploring senses out to see whether men and women would break. The children peeked at the faces of the men and women, then drew careful lines in the dust with their toes. Horses came to the watering troughs and nuzzled the water to clear the surface dust. After a while the faces of the watching men lost their bemused perplexity and became hard and angry and resistant Then the women knew that they were safe and that there was no break. They asked, What'll we do? And the men replied, I don't know....But it was all right.

We now know something about that "sinister force." It was caused by a large reduction in spending in all major sectors of the economy, set off by the great stock-market crash of 1929.31 This inability of pure capitalism to regulate itself—to avoid the ups and downs of the business cycle—is, as we noted earlier, capitalism's third tragic flaw. We will soon see how this problem is dealt with in a modern economy. First, however, let's return to our example at the beginning of the chapter.

Remember, we first decided to spend less, then quickly found ourselves in a recession, and later dropped into a deep depression. Now let's assume that after this unhappy time, people, businesses, and government decide to begin spending again. What will it be like at Joe's Super Sportshop?

Joe's business immediately picks up, forcing him to rehire his part-time clerk. He is no longer tripping over surplus boxes of baseball mitts. In fact, when Margie Miller comes in to buy her autographed Lou Gehrig Little League baseball mitt, Joe discovers that he is all sold out. He quickly dials his distributor in Seattle, who quickly writes a purchase order to the Ajax Mitt Company. Ajax receives similar letters from distributors throughout the country. The plant immediately rehires its laidoff workers and gears up for full-capacity production. Finally, the directors of Ajax meet and approve the ground breaking for not one but two new midwestern plants.

Happy times have returned. Things are humming along in all of the economy's major industries. Everyone appears satisfied; more and more expenditures are flowing through the system, buying up greater and greater amounts of goods and services. Notice, too, that once there is upward motion in the economy, everything tends to reinforce this trend. Greater spending generates more employment, more income, and more investment spending. Each of these new spending dollars, in turn, generates another round of spending and enlarged incomes. The pace accelerates—perhaps too fast. At the point that resources become fully employed, the total demand begins to strain the available supply. The result is the beginning of inflation, as more and more dollars "chase" after a limited supply of output.

At first, of course, there is not much to worry about. A few prices increase here and there as inventories become depleted; product shortages are a little more frequent than before. But when demand begins to expand too fast, the existing plant capacity soon becomes overloaded as our labor force and industrial output become fully utilized. Businesses are under pressure to expand to meet the growing demands for their goods and services, but simply do not have enough resources to produce these products! As they attempt to buy existing raw materials and to attract skilled labor, businesses find they have to pay more and more. Labor unions are quick to take advantage of the "seller's market" for labor, and wages are pushed up before long. Businesses don't mind too much; they try to pass their increased costs on to consumers in the form of higher prices. Inflation that results from higher costs is often referred to as cost-push inflation. Higher labor costs, however, mean fatter paychecks. This extra demand pulls prices up again (too many dollars chasing after too few goods), and we experience another round of demand-pull inflation.

These two factors (excess demand and higher costs) pull and push the economy again and again, as if bending a wire back and forth. The heated-up economy soon reaches a breaking point. This hyperinflation can be as devastating to an economy as a depression; both are extreme economic conditions that can and must be avoided. We will look at these two problems in more detail in a moment, but first let's look at a diagram that shows what we have learned thus far.

Figure 8-1 looks something like the supply and demand graph we examined in Chapter 3. Here, however, the vertical axis represents the overall price level. Any upward movement on the price scale can be directly translated into inflation. The horizontal axis represents output and employment. Both of these

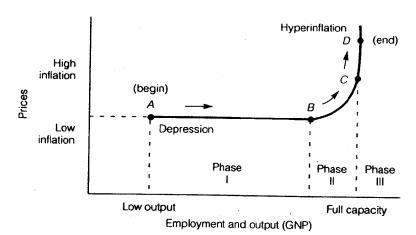


FIGURE 8-1 If we begin at depression point A and increase national spending, then GNP increases without any inflationary penalty throughout Phase I. If extra spending increases GNP with some inflationary penalty, then we are in Phase II, or the trade-off area. Finally, if extra spending results in only higher prices, then we are operating in Phase III.

values are directly related. If output is high, we know employment will also be high; if output is low, employment will be low.

Let's begin at point A (in the midst of the Great Depression). Note the relatively low price level combined with a small GNP and high unemployment. As we begin to spend more, we move along the solid line to the right. Each additional dollar spent increases employment and output without any inflation penalty. This remains true all the way through Phase I. Once we reach point B, any additional spending not only increases output but also creates some degree of inflation. We call this Phase II, or the trade-off area. If we want higher levels of output and employment, we must accept a trade-off in the form of higher prices. Once we reach point C, however, if we spend beyond it, we gain nothing in output and employment (because the economy is already operating at full-capacity output), but we completely lose out to hyperinflation.

We might generalize and say that to operate in either Phase I or III is a serious mistake, since we can still gain employment (without any inflation penalty) beyond Phase I and Phase III represents nothing more than sustained inflation (with no employment advantage). The logical place to operate (if we are in control of things) is in Phase II, or the trade-off area. Let's magnify this section of our graph (see Figure 8-2) to see precisely how the trade-off area operates.

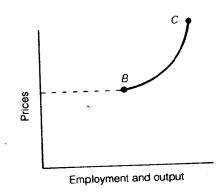


FIGURE 8-2 Trade-off area (magnified): note that prices tend to increase (inflation) when employment increases. On the other hand, if the economy is operating at a low price level, full employment will probably not be maintained.

Trade Off

In reality, a trade-off is actually a variation of the old saying, "You can't have your cake and eat it too." We can't have full employment and zero inflation at the same time. **Trade off** forces us to choose the objective that we value most: high employment or low inflation. For example, if we operate at point B in the trade-off area in Figure 8-2, we are choosing a low inflation and high unemployment. On the other hand, if we choose an area near point C, we are opting for full employment with relatively high inflation.

Sometimes economists prefer to portray this same trade-off problem in a slightly different format, popularly called the **Phillips curve** after A. W. Phillips, who studied historical trade-off data in Great Britain in the 1950s. Instead of plotting employment on the horizontal axis, the Phillips curve plots unemployment, which reverses the curve but shows essentially the same trade-off concept. In Figure 8-3, a Phillips curve indicates unemployment and inflation from 1964 to 1969. Take a careful look at the general shape of the Phillips curve, and note how it portrays the trade-off concept.

Over some time periods, as in Figure 8-3, a Phillips curve will show a fairly good trade-off relationship; over other time periods, the relationship will not be so neat and tidy. Still, government policymakers must often contend with the trade-off dilemma and make some tough choices. The comment "If we are

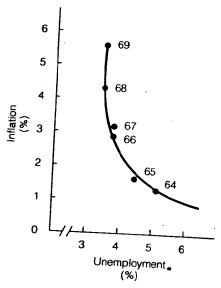


FIGURE 8-3 The Phillip's curve indicates a fairly clear trade-off between the inflation rate and the unemployment rate for 1964-1969.

ever going to solve our terrible inflation problem, we may have to have a recession" is an example of the sort of painful choice that sometimes must be made when dealing with a severe economic problem. How is such a choice made? For example, which problem-inflation or unemployment-is going to give the economy more trouble? Economists can't say for sure because each problem affects us differently. So, let's take a closer look at the specific economic impacts of both of these economic

Inflation

Exactly why is inflation bad? Most people have jobs during high inflationary periods, and inflation alone normally does not reduce output. The problem is that inflation distorts the economy; it redistributes large portions of the economic pie away from some people and places that income into the hands of others-often unfairly or free of charge.

Indeed, some groups fare well during inflationary times. Anyone on a flexible income, for example, will usually do all right. Workers represented by labor unions with bargaining clout (and inflation-based escalator clauses in their contracts) tend to benefit. Large corporations may also profit. Since demand is usually high, during an inflationary period, businesses are often able to raise their prices in response to higher labor and raw-materials costs. Speculators who purchase property, gold, rare coins, paintings, or other "inflation hedges" at bargain prices and then sit back to "let inflation do its work" also reap financial rewards from inflation. Finally, borrowers of large amounts of money often find themselves in good shape during an inflationary period because they can pay back their loans in inflated dollars, which are easy to come by.

It shouldn't be difficult to see which groups are the hardest hit by inflation. Fixed-income families suffer the most. These include, among others, the millions of marginal workers in lowpaying, nonunion industries, retail clerks, hotel and restaurant workers, and others who work at or below the minimum wage.

Since borrowers gain as a result of inflation, lenders often lose out; so do savers, who watch (with great frustration and bitterness) their saved-up purchasing power evaporate under the heat of rising prices. The so-called "virtues" of a nationhard work and thriftiness—become cruel hoaxes, and the "vices" of speculation and excessive borrowing are rewarded. Inflation becomes a silent economic disease that saps incentives—a disease that renders people unsure of the present economic reality and fearful of what the economic future will bring.

Unemployment

Now let's look at the other side of the trade-off dilemmaunemployment. To be unemployed means more than "just not having a job." By definition, a person is unemployed if they are actively seeking employment but cannot find work. To find out who is unemployed, the U.S. Census Bureau samples numerous households each month, asking the key question, "Have you been actively looking for work in the past four weeks?" If the person answers "yes" but has not been able to secure either partor full-time employment, then they are considered officially "unemployed" by the federal government.

Surprisingly, not all unemployment is undesirable or harmful to the economy. Economists say that frictional unemployment affects about 4 percent of the labor force; people in this

category are looking for work for the first time or are voluntarily changing jobs. They are actively seeking work, but their situation is not terribly serious. In fact, without some frictional unemployment, our economy would lose the measure of efficiency that is brought about by labor mobility. Since there is no way to reduce this kind of unemployment (and we would not necessarily want to), we can say that our economy is "fully employed" when we are at or near this 4-percent level. Putting it slightly differently, when 96 percent of all potential working people are employed, we can say that the labor force is operating at or near full capacity.

However, other categories or types of unemployment are more serious and often more intractable. For example, at any given time, there is a group of unemployed people that economists call discouraged workers who have simply given up hope of finding work. Although we don't know who all of these discouraged workers are, they include married, college-educated women who would like a good job but can find nothing available where they live and lack the mobility to move to where the jobs are. And there are middle-aged men and women who are fired, phased out, or indefinitely laid off; these individuals may have worked for years but now find that no one wants to hire them. There are also many Americans from minority groups who have simply given up trying to find jobs because of racial discrimination. These are just a few examples of the disappointed dropout workers who exist in an economic limbo.

Then there are the structurally unemployed. We already learned something about this group in Chapter 6. They are workers whose skills became obsolete or whose jobs disappeared when local businesses shut down or moved away. The problems of the structurally unemployed cannot be readily solved by more spending and greater economic expansion. These workers need to be retrained in new skills and often need assistance to relocate to areas where jobs are available.

Finally, we come to Keynesian unemployment, named after British economist John Maynard Keynes (1883-1946). This kind of unemployment results from a lack of spending and the resulting downturn of the business cycle (described at the beginning of the chapter). Keynes first devised the theory that this type of unemployment can be significantly reduced by instituting government programs designed to stimulate additional

spending. This was indeed a revolutionary idea, as few economists before Keynes had ever dreamed of manipulating an economic system.

Of course, western economies had always experienced the businéss cycle (wide swings from unemployment to inflation and back to unemployment), but nineteenth- and early twentiethcentury economists (often called classical economists) felt that an economy would automatically correct itself. It had to (they thought), because when output is produced by businesses, an equivalent amount of income must be generated by that production. As French economist Jean Baptiste Say (1767-1832) states in his famous Say's Law, "Supply creates its own demand."

So what did classical economists say would happen if we suddenly experienced a significant downturn in the business cycle, resulting in high unemployment? They reasoned that the unsold output would eventually force prices down. Low prices would, in turn, stimulate demand, and businesses would soon be rehiring their laid-off workers.

But what would happen if some people didn't get their jobs back? The classical economists had a logical answer for this, too. The lower wage would create an incentive for cost-conscious businesspeople to hire workers. The wage rate might drop considerably, but eventually everyone would be back at work, or so the reasoning went. The classical economist thought the worst thing that could happen to this neat, self-correcting system was to allow government to interfere. In short, the bywords of the classical age might have been "Stay cool and everything will take care of itself."

But then the Great Depression arrived. Something was terribly wrong. Unemployment went from bad to worse-and stayed that way year after year. Prices dropped; so did wages and interest rates. But there were no consumer spending sprees, and businesses did not invest or rehire the unemployed, even at the lower wage rates. Farmers found prices so low that at times they didn't bother to haul their crops to market. Incomes were so depressed that few consumers had sufficient purchasing power to buy up what was available. The nation was running out of patience. You don't "stay cool" for five years or more when you are out of work. What we needed was a new theory that worked The time was ripe for the genius of John Maynard Keynes. Let's examine his theory in greater detail.

Keynes and the Great Depression

To understand Keynes's ideas fully, we must develop a new model of the economy. It will be something like our old market model, except that now we must consider the markets for all goods and services. When we talk about "total supply", we mean real GNP. When we speak of "total demand," we mean the sum of all types of spending: consumption, business investment, government, and net foreign spending.

What would the total supply curve look like in our new model? Recall that the single market supply curve (Chapter 3) describes how much of one product suppliers want to provide at different prices. We now want that same information with respect to total supply, but this time we are dealing with the variables of spending and output, not price and quantity.

Thus, we ask the suppliers (all businesses), "If total spending were \$4 trillion, how much output (GNP) would you want to supply?" It should be obvious that if total spending (C + I + G + G) X_n) were at a level of \$4 trillion, businesses would theoretically want to supply the same amount (\$4 trillion) of GNP (see Figure 8-4a). Stated another way, suppliers would only produce \$4 trillion of GNP if they thought consumers would buy it up.

All the other points on our total supply curve (see Figure 8-4b) are quite easy to locate. For example, if there were \$8 trillion worth of spending $(C+I+G+X_n)$, then businesses would want to supply \$8 trillion worth of GNP output. In general, businesses would want to match any amount of spending with an equivalent amount of GNP supply. Each point dot on the total supply curve therefore falls on a straight line equally distant from both the output and spending axes. Our total supply curve (which doesn't really curve) therefore begins in the lower-left corner and shoots straight up to the right at an angle of 45°.

Now let's look at total demand. To construct our total demand curve, we must ask ourselves, "How do spenders react to changes in their incomes?" Let's look at an example. Suppose your individual income last year was \$9000, but your income this year was reduced to \$4000. What would happen to your spending pattern for this year? Most people faced with this situation would probably spend more than the \$4000 income (in the short run at least). Let's say that you spend \$8000, even though your income is only \$4000. (For a while, therefore, you

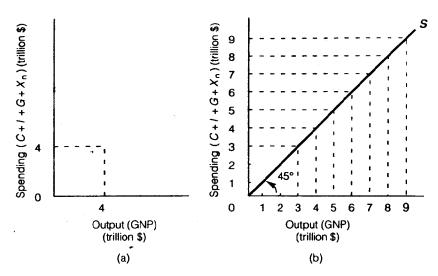


FIGURE 8-4 If total spending is \$4 trillion (a), businesses will want to supply \$4 trillion in GNP. At other levels of spending (b), businesses will also want to match each dollar amount spent with an equivalent amount of GNP output. The resulting aggregate (total) supply curve rises at a 45° angle.

will be borrowing money.) This point, which lies in the lower-left corner of the individual demand curve in Figure 8-5, represents something over \$8000 in spending but only \$4000 in income. Now suppose that you move up the income scale; your income is now \$16,000, and you find that you are spending all of it. We will label this point on our demand curve "no savings." Finally, at a \$32,000 income, you are able to save some money because you are spending only \$24,000.

But what about the overall economy? Will the shape of the total demand curve, which comprises $C + I + G + X_{a}$, be similar to the demand curve in Figure 8-5? Yes. It is reasonable to assume that when our incomes are suddenly reduced, we tend to spend more (at least in the short run); if our incomes suddenly go up, we are more likely to save. Community spending patterns are therefore similar to the spending patterns of individual families.

Now let's see what the total supply curve and the total demand curve look like together. In Figure 8-6, note that we have added GNP (total output) to total income on the horizontal axis. You may wonder how we can equate both concepts. Are they the same?

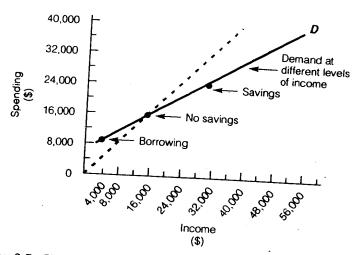


FIGURE 8-5 If an individual's income is severely-reduced, he or she will tend to borrow money in the short run (note the point in the lower-left corner of the individual demand curve). A short-term rise in individual income makes savings more likely. At the "no savings" point somewhere in between these two income levels, a person's income is exactly equal to his or her spending.

Yes; for every dollar's worth of output, a dollar's worth of income is generated. Thus, if we added up the incomes from all economic activity (wages, rents, profits, and interest), the total would be equivalent to the final value of our goods and services (GNP). Take, for example, the chair you are presently sitting in. Isn't its final price a "summary" of all the different incomes that went into producing and distributing the chair? We therefore say that total income equals GNP.

Returning to Figure 8-6, we can see that there is an equilibrium level of income (point B) at which aggregate (total) supply crosses aggregate demand (just as in Chapter 3 we had an equilibrium for the supply of, and demand for, corn). To prove that point B must be the equilibrium level, let's see what happens when we are not at this point?

At point A, we find that the spending level $(C + I + G + X_n)$ is greater than the amount of output produced. No equilibrium level of income can be achieved under these conditions, because if spending is greater than output, businesses must crank up production to meet the surplus demand. (Remember that businesses want to supply whatever is demanded.) Thus, at point A,

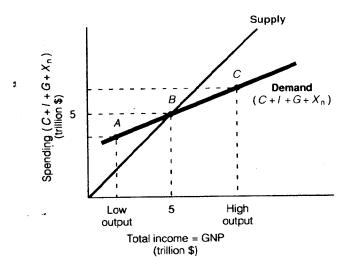


FIGURE 8-6 Aggregate supply and demand: at an equilibrium level (point B), the dollar value of GNP supplied (\$5 trillion) is equal to the dollar value of total spending. If the economy temporarily functions at point A or point C, then market forces tend to move the economy back to equilibrium point B.

forces are set in motion that push output to higher levels (that is, toward point B).

The economy can't remain at point C for very long either. Here, the spending level is *less* than the amount of output. This situation forces producers to cut back on output, reducing GNP, and we soon return to the equilibrium level of income. B is the only point on our graph at which output exactly matches the level of spending; it is therefore the only point we might characterize as a **stable equilibrium**.

We are now ready to appreciate and understand Keynes's great discovery. Keynes saw that an economic system might be in a stable equilibrium at a depression level of GNP. Graphically, this means that if the supply curve crosses through the demand curve at a low level of national income, the country could economically sit there for years and years. Classical economists talked endlessly about declining wages and prices in the 1930s, but these same self-regulating mechanisms never pulled us out of the worst depression in U.S. history. What we needed was a new theory and, even more important, new policies to deal with the punishing economic realities.

Fiscal Policy

What was Keynes's prescription? If we closely study the total supply-demand graph, we should be able to see what Keynes had in mind. What is needed is to "lift up" the total demand curve to the point at which supply crosses demand at a full-employment level of GNP. Let's see how this would look on our supply-demand graph (see Figure 8-7).

Keynes's basic prescription for lifting the total demand curve was to have the government stimulate demand by *injecting new spending* into the economy in one of two ways:

- 1. By increasing government spending ${\it G}$ (without altering taxes).
- 2. By decreasing taxes (without altering government spending, thereby increasing consumption expenditures \mathcal{C}).

Either or both of these fiscal (budgetary) policies will shift the total demand curve upward, as we can see in Figure 8-7.

Now look closely again at this figure. Do you notice anything unusual? A careful examination of the upward shift in demand shows that a relatively *small* increase in spending results in a *large* increase in income and output. For example, a \$10 billion increase in government spending might result in a \$20 billion (or greater) increase in GNP. In short, any extra dollars spent are supercharged dollars! Economists call this the **multiplier effect**.

Why are these new spending dollars multiplied? Let's consider an example. If the government cuts my taxes by \$5, my personal income will increase by \$5. I may spend all or part of that \$5. Let's say I save \$1 and spend the rest. My \$4 expenditure suddenly becomes extra income for someone else (perhaps the plumber who fixed my leaky kitchen sink). The plumber, in turn, may save a little of this extra income and spend the remainder, as will the next person, and the next. Now if \$4 of extra spending has a supercharged effect, so will an extra \$5 billion, or \$50 billion. Of course, this effect can work in reverse, too; a \$5 billion reduction in spending will obviously reduce GNP by much more than the original \$5 billion.

Although the strategy to cure a recession can be rather simply stated—increase government spending and reduce taxes—the administration of these policies is another story. Any time you adjust expenditures and taxes you are tampering with the

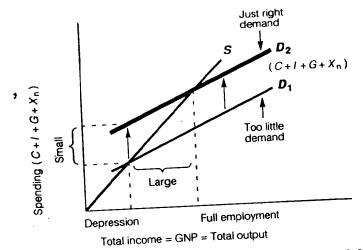


FIGURE 8-7 The Keynesian solution: if there is insufficient total demand in the economy (D_1) , a depression may be avoided if the government institutes policies to increase total spending to D_2 . Note that a relatively small increase in demand can create a relatively large increase in GNP. This is called the multiplier effect.

federal budget. What would the impact on our federal budget be if we lowered taxes and simultaneously increased government expenditures? We would obviously have a **deficit**, and budget-ary deficits are usually considered "bad economics." Indeed, in the 1930s, "spending your way into prosperity" seemed rather odd to some and even dangerous to others. The federal budget simply had to be balanced.

The Great Depression of the 1930s might therefore have been avoided by federal budgetary manipulation. Even as recently as the Kennedy administration, members of Congress were not totally receptive to the idea of stimulating the economy with a tax cut. However, when the Kennedy tax bill was passed in 1964, the sluggish economy steamed ahead with such speed that the taxes collected on higher incomes eventually paid back the deficit incurred by the original tax cut!

It was, in fact, the spending for the Vietnam War and expensive social programs (in the late 1960s) plus the huge upsurge in OPEC oil prices (during the mid-1970s) that spoiled what might have been an age of real economic growth with only moderate inflation. Instead, the decade of the 1970s brought Americans a new and painful period of high inflation.

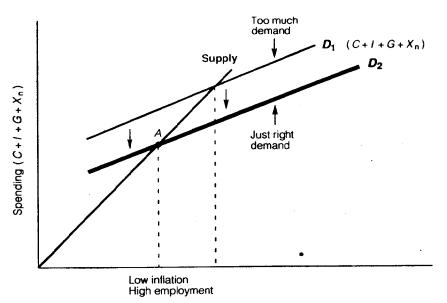


Figure 8-8 If there is too much total demand (D_1) , inflation may be avoided if the government sets up policies to reduce total demand to a noninflationary level of GNP (D_2) .

What would Keynes have said about inflation? What fiscal policies would be in order now? To answer this, let's take a look at how the problem of inflation affects the graph of total supply and total demand (see Figure 8-8).

Obviously, the problem is now too much demand. The economy is producing at full capacity (maximum output), but the spending level is even greater than the available GNP. It's a classic example of demand-pull inflation, when "too many dollars are chasing after too few goods."

Looking at Figure 8-8, we see that demand curve D_1 intersects the supply curve S far above the point of full-employment GNP and should be brought down to a *noninflationary* point. Although we may not be able to achieve the ideal of zero inflation and full employment at the same time (recall the trade-off problem), there is no reason why we cannot aim for minimal inflation with relatively high employment (point A).

The correct anti-inflationary prescription to pull demand down is to raise taxes, lower government spending, and generally work toward a budgetary **surplus**. Indeed, this solution seems relatively simple. So why is it so difficult to administer an anti-inflationary economic policy?

To come to grips with the problem of inflation, we must understand the mysteries of the political process, since fiscal policy is ultimately decided by the President and the Congress. Let's return for a moment to Keynes's prescription for combating unemployment. Although there were some qualms about budgetary deficits at one time, the remedies themselves (cutting taxes and increasing spending) can be almost "enjoyable" for a politician. Everyone likes a hefty tax cut, and special-interest groups—from the Army to the Peace Corps, from the poverty worker to the peanut farmer—thrive on additional spending programs. So the cure for a recession is kind of a "welcome problem," because every politician from the President on down stands to gain in popularity with each new tax cut, each new subsidized program, and each additional worker put back on the job.

Inflation is something else, however. Following up on the economists' recommendations to increase taxes and cut back vested interest programs can be political suicide. In fact, a number of economists have concluded that the Keynesian remedies for inflation are simply inoperable because of these political realities.

Thus, until the 1970s, we could say that the Keynesian revolution in economic policy gave us a good measure of economic security. Indeed, the United States has been pretty good at avoiding serious economic downturns since the 1930s. Most economists felt then that unless new and unknown factors (war, global drought, a world debt crisis, etc.), occurred in the near future, the United States would probably never live through another Great Depression—thanks, in a large part, to Keynes!

But then the 1970s arrived, with an energy crunch and unacceptable rates of inflation. Suddenly Keynesian policies did not seem to be working. Not only was there political paralysis in dealing with inflation (including the failure of price-wage controls), but the country was also moving toward a new era of inflation and recession combined. By the mid-1970s, we were hearing the ominous word stagflation (stagnation + inflation) more and more. By 1975, it was apparent that for the first time in our history, we would have inflation rates of greater than 8 percent, combined with a bonafide recession! Some economists were advocating contractive fiscal policies to combat inflation; others wanted just the opposite—large tax cuts to help put people back to work. In short, there were no longer any simple Keynesian remedies.

Supply-Side Economics

Thus, the stage was set in the early 1980s for a new approach—supply-side economics—to emerge. Supply-side theory revolves around two key ideas that are intimately intertwined: economic incentives and economic growth. More specifically, it assumes that what our stagflated economy needs is not an additional spending stimulus but greater incentives to improve the supply of goods and services.

The government (under the Reagan administration) chose to encourage these incentives by reducing overall tax rates. The centerpiece supply-side legislation, initiated in 1981 and reinforced in 1986, included large, across-the-board, individual taxrate cuts designed to stimulate work efforts and generate greater savings. It was hoped that these reforms would (in the long run) translate into more investment spending and that this additional investment plus the work incentive would, in turn, enhance the nation's productivity (output per worker). Improved productivity might then moderate inflation and promote growth. Finally, the resulting growth (according to supply-side theory) would generate such a large increase in the nation's income that the additional tax revenues would eventually pay back the shortterm loss of revenue caused by the lower tax rates. If everything worked as intended, a balanced budget and higher growth and productivity would be achieved without any inflationary penalty.

Supply-side recommendations also included offering greater incentives for business investment and for research and development and reducing the web of government regulation that often frustrates business activity and adds to production costs. Supply-side theorists claimed that far too much attention was being paid to stimulating the demand side of the economy, to enforcing cumbersome regulations, and to evolving a tax system that discouraged saving, risk-taking, and work effort, thereby diminishing the supply side of the equation.

Actually, supply-side economics is not an entirely new idea. Say emphasized supply, which he was certain would "create its own demand" sooner or later. Economic philosophers David Hume (1711–1776) and Charles Montesquieu (1689–1775) warned their eighteenth-century readers that excessive tax rates would result in a diminishing work effort. In fact, perhaps no one described the central thesis of supply-side economics better than Montesquieu, when he wrote

Nature is just to all mankind; she repays them for their labors; she renders them industrious because she attaches the greatest recompense to the greatest works. But if an arbitrary power snatches away the rewards of nature, one will learn distaste for work, and inactivity will appear to be the only good.³²

Montesquieu's sentiments undoubtedly hit a responsive chord among Reagan's economic theorists, who were eagerly looking forward to the predicted benefits of the supply-side tax legislation and other initiatives.

Unfortunately, however, these supply-side policies did not achieve many hoped-for goals. For one thing, annual federal deficits had ballooned to unheard of heights by the end of the Reagan era. The **public debt** (the summation of all yearly federal deficits) nearly tripled from \$909 billion in 1980 to \$2.6 trillion in 1988. (A trillion, keep in mind, is equivalent to a thousand billion.) Nor did the U.S. savings rate improve. In fact, for a number of years, it actually declined. And productivity—a key to long-run inflation control and ultimately to our overall standard of living—continued at a low and worrisome rate. From 1980 to 1988, productivity increases averaged only 1.3 percent per year (about the same rate as in the 1970s and only one-half the rate of the 1960s). These were all, most experts agree, serious and continuing problems.

On the positive side of the performance ledger, the Reagan administration (with decisive help from the Federal Reserve System) had reduced the inflation rate significantly by 1983; thereafter, Americans enjoyed not dramatic growth, but steady improvements in the real GNP and relatively low joblessness. The economy kept plugging away, showing positive growth rates, and had achieved the longest peace-time expansion (with no recession) in U.S. history by the turn of the decade. Economists disagree as to whether supply-side policies should be credited for this economic growth or whether the credit should go to "old-fashioned" Keynesian deficit spending, combined with a concurrent expansion of consumer and business debt. Indeed, such interpretations are part of a continuing and healthy debate among economists and others who are concerned about the direction and performance of our economy.

Recall, too, that another group of economists see the future as a period of dwindling global resources and are skeptical about the possibility of continued economic expansion. Their ideas, in contrast to those of Reagan supply-siders and Keynesian

demand-siders, revolve around how to rearrange the economic system so that we can be reasonably well off without continual exponential economic growth.

At any rate, new theories eventually supersede the old. Creative and innovative ideas, combined with specific policies to deal with changing economic conditions, are continually needed. Hence, we will always be looking for economic philosophers like Adam Smith or John Maynard Keynes—this time, however, for one who can match wits with our own troubled times.

Questions for Thought and Discussion

- 1. What are some solutions for "stagflation"?
- 2. What is a "peace dividend"? If the nation had a peace dividend of \$100 billion dollars, how, in your opinion, should we use it? List priorities and defend your list.
- 3. Why did the classical economists cling so defiantly to their theory?
- 4. How can we say that output equals employment when they are not expressed in the same units of measure?
- 5. In the 1960s it was not uncommon to hear the opinion: "We need a war to maintain our prosperity." Evaluate this statement in terms of your knowledge of fiscal policy and recent economic history.

9 Money

Imagine that you and 50 friends, acquaintances, and relatives are all shipwrecked on a large, lovely island in the middle of the South Pacific. At first, it is an idyllic life as everyone lounges on the sunny beach waiting for the rescue ship to sail into view, but after a few days you begin to realize the seriousness of your predicament. With grim faces, everyone gathers on the beach to map out some kind of survival plan.

A governing body is elected, and soon the necessary tasks are taken up by different individuals. Since Joe Jones is a carpenter, he volunteers to build thatched huts for everyone. Smith and Baker are assigned to make fishing boats and nets. Chester Olson will gather wild foods for the community larder.

Time passes. The island economy becomes more specialized and complex. Before too long, major problems arise as people experience bottlenecks in their transactions. They become frustrated when they attempt to get their thatched roofs mended or to obtain food for the evening meal. What's wrong?

The problem is that our little economy has become so complex that some kind of monetary system is needed. The islanders are currently using the **barter system**, freely exchanging goods and services when they are needed. This works fine on a limited scale, but when a few more jobs are assigned to